

# Boston

BostonAcoustics.com

Technical Information

## Competitor Series Subwoofers Specifications and Driver Parameters

Specification:	1500	1200	1000	800
Nominal Size	15" (38cm)	12" (30cm)	10" (25cm)	8" (20cm)
Mounting Cutout Diameter	13-7/8" (353mm)	11" (280mm)	9-3/16" (234mm)	7-1/8" (181mm)
Mounting Depth—Front Mounted	7-3/4" (197mm)	6-5/8" (169mm)	6" (153mm)	5-3/8" (137mm)
Mounting Depth—Rear Mounted	8-1/4" (210mm)	7-1/8" (181mm)	6-5/8" (169mm)	5-7/8" (150mm)
Recommended Amplifier Power	50–1000 watts	50–1000 watts	50–850 watts	50–500 watts
Nominal Impedance	2Ω/4Ω	2Ω/4Ω	2Ω/4Ω	2Ω/4Ω
Recommended Enclosure Sizes:				
Gross Internal Volume	1.5ft <sup>3</sup> (43 liters)	1.0ft <sup>3</sup> (28 liters)	0.5ft <sup>3</sup> (14 liters)	0.3ft <sup>3</sup> (8.5 liters)
-3dB Down Point (In-car)	20Hz	20Hz	20Hz	20Hz
System "Q" (2Ω/4Ω)	1.36/1.56	1.03/1.12	0.92/0.98	0.69/0.73
Recommended Enclosure Dimensions:				
Height (Internal)	10.0" (26cm)	10.5" (27cm)	7.5" (19cm)	6.5" (16cm)
Width (Internal)	16.0" (41cm)	13.0" (33cm)	11.0" (28cm)	9.0" (23cm)
Depth (Internal)	16.0" (41cm)	13.0" (33cm)	11.0" (28cm)	9.0" (23cm)

We provide Thiele/Small Parameters for those interested in studying subwoofers further. We do not recommend you use computer software to determine enclosure size or type. While high-end enclosure design software may be useful for preliminary engineering purposes, it cannot completely predict performance in a given vehicle and should not replace a real enclosure that has been tested and listened to in a car. The best a computer screen can do is give you a visual representation of what something sounds like. Please use our recommended enclosures for optimum performance.

Theile/Small Parameters:	1500(2Ω)	1500(4Ω)	1200(2Ω)	1200(4Ω)	1000(2Ω)	1000(4Ω)	800(2Ω)	800(4Ω)
Resonant Frequency (F <sub>s</sub> )	34Hz	35Hz	30Hz	31Hz	33Hz	34Hz	35Hz	36Hz
Equivalent Volume (V <sub>as</sub> )	155 liters 5.47ft <sup>3</sup>	155 liters 5.47ft <sup>3</sup>	84 liters 2.97ft <sup>3</sup>	84 liters 2.97ft <sup>3</sup>	35 liters 1.24ft <sup>3</sup>	35 liters 1.24ft <sup>3</sup>	21 liters 0.74ft <sup>3</sup>	21 liters 0.74ft <sup>3</sup>
Total Q (Q <sub>ts</sub> )	0.72	0.85	0.45	0.57	0.44	0.53	0.33	0.40
Electrical Q (Q <sub>es</sub> )	0.81	0.97	0.47	0.61	0.47	0.57	0.35	0.42
Mechanical Q (Q <sub>ms</sub> )	8.3	8.3	9.8	9.6	8.0	7.8	9.0	9.0
Compliance (C <sub>ms</sub> )	142μm/N	142μm/N	230μm/N	230μm/N	255μm/N	255μm/N	330μm/N	330μm/N
Moving Mass (M <sub>ms</sub> )	148g	145g	121g	117g	90g	86g	63g	60g
Cone Area (S <sub>d</sub> )	876cm <sup>2</sup>	876cm <sup>2</sup>	510cm <sup>2</sup>	510cm <sup>2</sup>	315cm <sup>2</sup>	315cm <sup>2</sup>	215cm <sup>2</sup>	215cm <sup>2</sup>
Voice Coil Diameter	51mm	51mm	51mm	51mm	51mm	51mm	51mm	51mm
Voice Coil DCR (R <sub>e</sub> )	1.6Ω	3.2Ω	1.6Ω	3.1Ω	1.6Ω	3.1Ω	1.6Ω	3.1Ω
Voice Coil Inductance @ 1kHz (L <sub>e</sub> )	0.45mH	0.62mH	0.40mH	0.55mH	0.40mH	0.55mH	0.40mH	0.55mH
Linear Excursion—One Way (X <sub>max</sub> )	5.5mm	5.5mm	8.5mm	8.5mm	8.5mm	8.5mm	8.5mm	8.5mm
Peak-to-Peak Max. Excursion	40mm	40mm	40mm	40mm	35mm	35mm	35mm	35mm
Reference Efficiency (η <sub>o</sub> )	0.73	0.64	0.46	0.39	0.26	0.25	0.25	0.22

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